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A PLATE-HOLDER FOR THE NAFA-3S/25 CAMERA

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Translation of "Kasseta dlya fotoplastinki kamery NAFA 3s/25".

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ABSTRACT: A plate-holder is described which can be used for taking photographs with the Camera NAFA-3s/25 not only on film, but also on glass plates.

Plate-holders, permitting plates to be used instead of film for photographing satellite transits, have been built in the shops of the Astronomical Institute of The Czechoslovakian Academy of Sciences in Ondrzheyov for improving the accuracy of the photography of artificial satellites obtained with the NAFA-3S/25 camera. The plate-holders are designed for plates with an 18 cm x 24 cm format. /8*

The plate-holder operation is clear from Fig. 1. The plate-holder with cover screen (7) is mounted on the camera (1). After the plate-holder is loaded, the photographic plate (3) is held in the position, indicated by the dashed line, by means of the spring (11) loaded clamp (9). The plate-holder is closed off by the standard components of the camera; then the screen (7) is opened by turning the knob (6) and the plate is moved into the focal plane of the camera, which coincides with the rear surface of the frame glass (2). This is done by pushing the button (5) into the position shown in the figure. The plate is fixed in this position: the operation of the spring (11) ceases; however, the flat springs (12) hold the plate against the frame glass (2).

After the exposure the button (5) is released, the spring (11) overrides the pressure of the spring (12), and the plate is raised to the position shown by the dashed line. The screen is closed and the plate-holder can be removed. In the photographic laboratory the blind is opened and the screw (10) is loosened. As a result of this air enters under the clamp (9) and the plate is released. In loading the plate-holder the photographic plate is placed emulsion-down on the back plate and the spring (9) is actuated by means of a slight pressure on the screw (10). The button (5) is released and the plate remains in the position shown by the dashed line.

The knobs (6) are used to control the screen. These knobs also serve as stops to limit the extreme positions of the screen; they prevent the screen from opening of its own accord and from dragging. Their operation is clear from Fig. 2.

The described plate-holder desigh permits the use of photographic plates which no special preparation of the camera and permits rapid interchange of the film-holder and plate-holder.

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*Numbers in the margin indicate pagination in the foreign text.

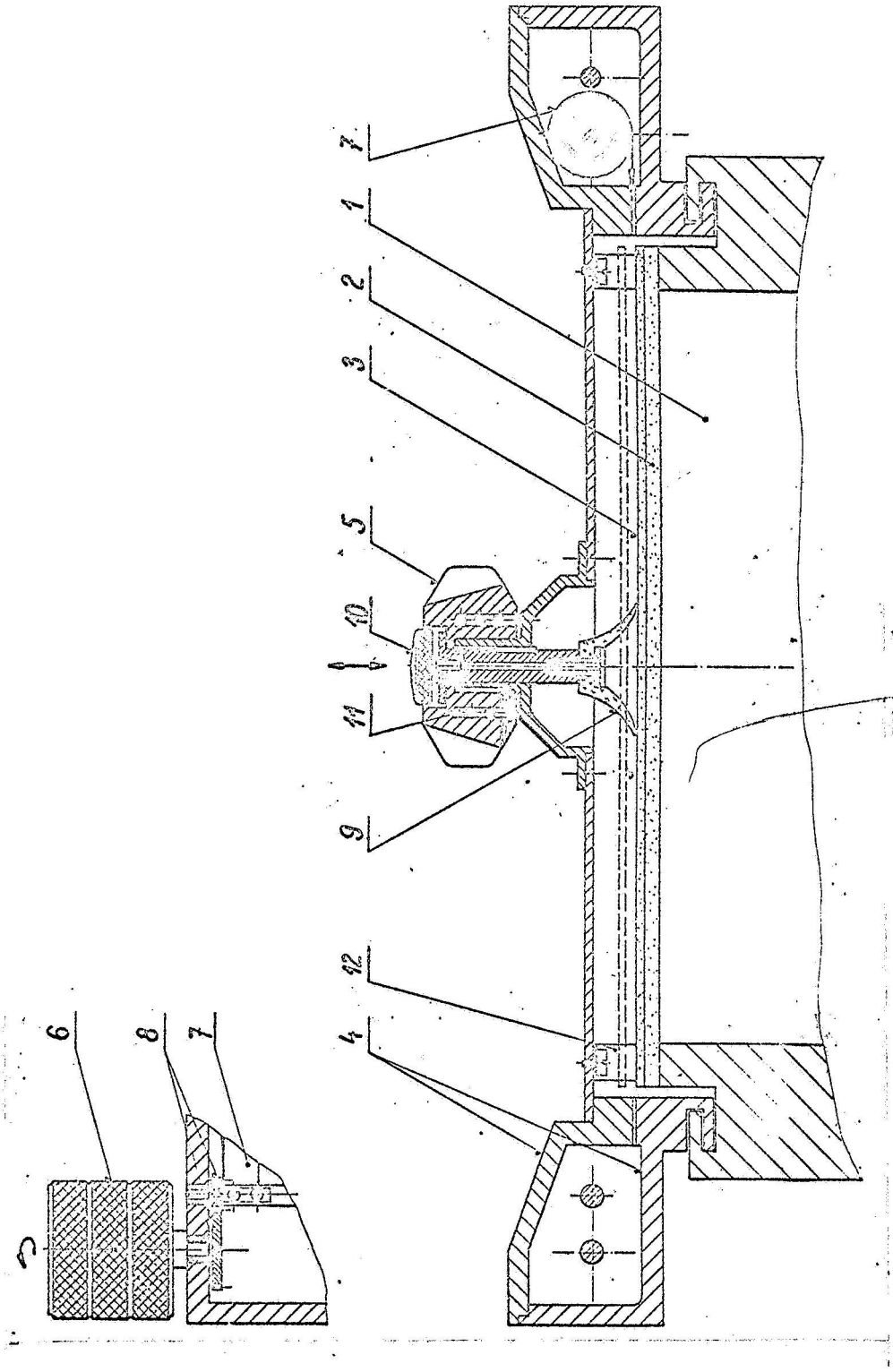


Figure 1.

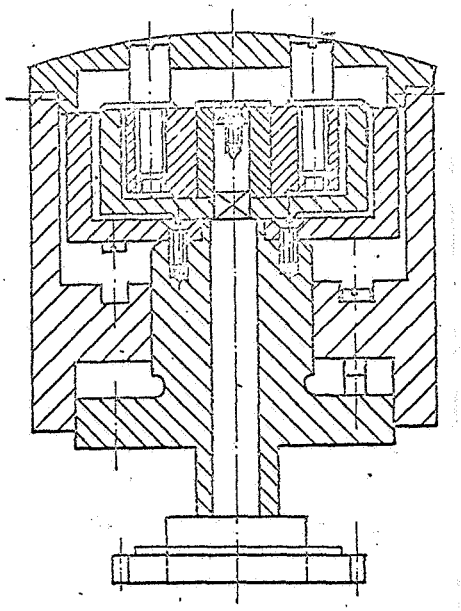
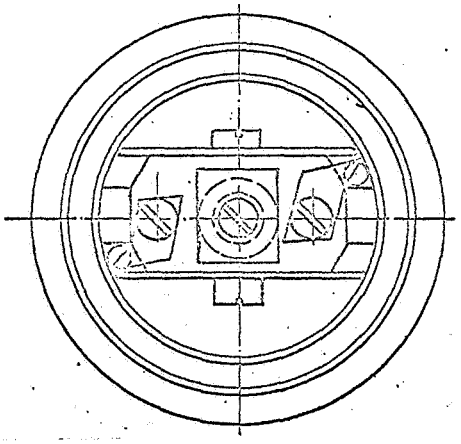


Figure 2.



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